

API # 47-103-01757

## State of West Virginia Division of Environmental Protection Section of Oil and Gas

Well Operator's Report of Well Work Farm name: ASH, JOHN L. & LAURA Operator Well No.: F.ANDERSON #2 LOCATION: Elevation: 958.00 Quadrangle: FOLSOM District: GRANT County: WETZEL 15085 Feet South of 39 Deg. 30Min. 0 Sec. 5700 Feet West of 80 Deg. 35 Min. 0 Sec. Latitude: Longitude Company: COBHAM GAS INDUSTRIES, IN P. O. BOX 1697 CLARKSBURG, WV 26302-1697 Agent: RICK UNDERWOOD

Inspector: RANDAL MICK 11/20/97 Permit Issued: Well work Commenced: Well work Completed: 1/6/98 1/22/98 Verbal Plugging Permission granted on: Rotary X Cable Rig
Total Depth (feet) 2360
Fresh water depths (ft) 5; 25; 63 Salt water depths (ft) None Is coal being mined in area (Y/N)? N Coal Depths (ft): 170; 410; 710

Casing   & Tubing	Used in Drilling	Ì	Cement    Fill Up    Cu. Ft.
Size			To Surfac
<u>13_3/8</u>	70	70	100 sks
9 5/8	   <sub>809</sub>	   <sub>809</sub>	To Surfac
4 1/2	   2281	<u> </u>	681'fill 140 sks

## OPEN FLOW DATA

Producia	ng formation	Big Injun		Pay zone	depth	(ft)209	9-2105
	itial open flow						
Fi	nal open flow	100 MCF/c	i Fir	nal open i	flow		Bbl/d
Ti	me of open flow	between in	itial and	final tes	sts		Hour
Static :	rock Pressure	150 psig	(surface	pressure	) after	8	Hour
	· ·						_
Second	producing forma	tion No		Pay zone		(ft)	
	itial open flow						Bb1/
Fi	nal open flow	MCF/c	i Fi	nal open :	flow		_Bbl/
Ti	me of open flow	between in	itial and	final tes	sts		Hour
Static	rock Pressure	psig	(surface	pressure	) after	<u> </u>	Hour

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATE INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELLOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

RECEIVED W Division of Environmental Protection	
Environmental Protection	

MAR 1 1 1998 1

COBHAM GAS INDUSTRIES, INC. For: COBHAM GAS INDUSTRIES, INC.

By: March 1998 Date:

Permitting Office of Oil & Gas

FRAC

Big Injun 2099-2105 (20); Crosslink Frac; 20,000 1b20/40 Sand; 12bb1 HCL

	Formation Descri	iption		
Soil Shales & Red Rock	0 <b>-</b> 50 50 <b>-</b> 170		Water @ 5 & 25'-total Water @ 63'	1 1/2'strea
Coak	170 - 175			
Sand & Shales	175 <b>-</b> 380			
Red Rock	380 - 410			
Coal	410 - 430	(1) (1)	Coal @ 410'	<b>T</b>
Shales	430 - 710	:		
Coal	710 - 720		Coal & Aldin F	3
Shales	720 - 1320		The Civician of	
Sandstone	1320 - 1450	-	Environmental Protection	- 1
Shales	1450 - 1530			
Sandstone	1530 - 1560		90R 1 1 1998	-
Shales	1560 - 1620			
Sandstone	1620 - 1650		Permitting	
Shales	1650 - 1710		Office of Oil & Gas	
Sandstone	1710 - 1750		<b>\</b>	•
Shales	1750 <b>–</b> 1975			į
Big Lime	1975 - 2045	7		<b>.</b>
Big Injun	2045 - 2210		Gas show @ 2100	
Shales	2210 - TD			
T.D.	2360			

Environment dection MA.

Permitting
Office of Oil & Gas
Cincolor on & Gas

6-	DIVIS	ION OF EL	NVIRONMENT	TAL PROTEC	TION, OFFI	CE OF OIL A	IND GAS
t <del>o</del>					APPLICATIO		103 1757
1)	Well Ope	rator:	Cobham Gas	Industries	632 , Inc. 1019:	5 (4)	349
)	Operator	's Well 1	Number: F	Anderson	#2	3) E	levation: 958
)	Well typ	e: (a) (	oil/	or Gas	<u>x</u> /	essu.	ed 11/20/97
		(b) I	If Gas: I		<u>x/</u> Underg	couna Stora	19e
				Deep			.ow <u>x</u>
1	Proposed	Target 1	Formation (	(s):	Big Injun		No.
0)	Proposed	Total De	epth:	2300	feet		Nov. 1007
7)	Approxim	ate fresl	h water st	rata dept	chs: 64'	Off	65 my 100>
8)	Approxim	ate salt	water der	oths:	Non	e	
9)	Approxim	ate coal	seam dept	ths:	714	t	43
10)	Does lan	d contain	n coal sea	ams tribut	tary to act	ive mine?	Yes/ No_X_/
11)	Proposed	Well Wo	rk:	Drill a	nd Stimulate	•	
12)							
14)							
12)			CASING	S AND TUB	ING PROGRAM		
TYPE		S			ING PROGRAM FOOTAGE I		CEMENT
		Size		IONS Weight		NTERVALS Left in	
TYPE	uctor		PECIFICAT	IONS Weight	FOOTAGE I	NTERVALS Left in	Fill-up
TYPE		Size	PECIFICAT: Grade	Weight per ft.	FOOTAGE I	Left in well	Fill-up
TYPE	uctor h Water	Size	PECIFICAT Grade	Weight per ft.	FOOTAGE I	Left in well	Fill-up (cu. ft.)
Cond Fres	uctor h Water	Size 16" 13 3/8	PECIFICAT.  Grade  Api  Api	Weight per ft.	FOOTAGE I	Left in well  10  75	Fill-up (cu. ft.)
Cond Fres Coal	uctor h Water	Size  16"  13 3/8  9"	Grade Api Api H-40	Weight per ft.  55  48  26	FOOTAGE I	Left in well  10  75  800	Fill-up (cu. ft.)
Cond Fres Coal	uctor h Water rmediate	Size  16"  13 3/8  9"	Grade Api Api H-40	Weight per ft.  55 48 26	FOOTAGE I	Left in well  10  75  800	Fill-up (cu. ft.)
Cond Fres Coal Inte	uctor h Water rmediate uction	Size  16"  13 3/8  9"	Grade Api Api H-40	Weight per ft.  55 48 26	FOOTAGE I	Left in well  10  75  800	Fill-up (cu. ft.)
Cond Fres Coal Inte Prod Tubi	uctor h Water rmediate uction ng rs	Size  16"  13 3/8  9"  4 1/2	Grade Api Api H-40	Weight per ft.  55 48 26	FOOTAGE I	Left in well  10  75  800	Fill-up (cu. ft.)
Cond Fres Coal Inte Prod Tubi Line	uctor h Water rmediate uction ng rs	Size  16"  13 3/8  9"  4 1/2	Grade Api Api H-40	Weight per ft.  55 48 26	FOOTAGE I	Left in well  10  75  800	Fill-up (cu. ft.)
Cond Fres Coal Inte Prod Tubi	uctor h Water rmediate uction ng rs	Size  16"  13 3/8  9"  4 1/2  4 1/2  ad_ 2es_ 5ths set	Grade Api Api H-40 M-65	Weight per ft.  55  48  26  9.5	For drilling  10  75  800  2250	Left in well  10  75  800  2250	Fill-up (cu. ft.)
Cond Fres Coal Inte Prod Tubi Line	nuctor h Water rmediate uction ng rs ERS : Kir	Size  16"  13 3/8  9"  4 1/2  1d  2es  ths set	Grade Api Api H-40 M-65	Weight per ft.  55  48  26  9.5	For drilling  10  75  800  2250  and Gas Use	Left in well  10  75  800  2250  Only	Fill-up (cu. ft.)

| Plat | | WW-9 | | WW-2B | | Bond | | | Agent | | Agent

	DIVISION OF ENVIRONMENTAL PROTE	CTION, OFFICE OF OIL AND GAS
	NOTICE AND APPLICATION I	OR A WELL WORK PERMIT
4)	Surface Owner(s) to be served:  (a) Name John L. & Laura Ash  Address Rt. 9. Box 439  Fairmont, WV 26554	5) (a) Coal Operator: Name None Address
	(b) NameAddress	(b) Coal Owner(s) with Declaration Name None Address
	(c) Name	Name Address
6)	Inspector Randy Mick Address 111 Blackshere Drive Mannington, WV 26582 Telephone (304) - 986-3324	(c) Coal Lessee with Declaration Name None
	TO THE PERSON(S) NAMED A	BOVE TAKE NOTICE THAT:
Section I have	e served copies of this notice and	extract oil and gas <u>OR</u> red by Chapter 22B, Article 1, nia (see page 2) Chapter 22B of the <u>West Virginia Code</u> d application, a location plat, and on the above named parties, by: attached) ostal receipt attached)
familattadrespois trainfor	The terms and conditions of any perm I certify under penalty of law that liar with the information submitted that with the information submitted that have and that based on my inquiposible for obtaining the information, accurate, and complete.  I am aware that there are significant that it is a significant to the possibility well operator	at I have personally examined and am don this application form and all ary of those individuals immediately on, I believe that the information cant penalties for submitting false of fine and imprisonment.  Cobham Gas Industries, Inc.,
	NOTA BY PUPILS  STOTE TO DESCRIPTIONS  A STOTE TO DESCRIPTIONS  THE STOTE TO DESCRIPTION AND ADDRESS OF THE STOTE TO DESCRIPTION ADDRESS OF TH	d Underwood Rul Maland
	Address Rt. 4	, Box 350A, P.O. Box 1697
	With the terminal Film { Telephone	sburg, WV 26302-1697 304-623-0374
Subsc	cribed and sworn before me this 3/	day of October, 1997
My co	ommission expires DAGUACOUS	Notary Public
-11 00	ommission expires <u>Shound 15</u>	200 H

STATE OF WEST VIRGINIA

2) Operator's well number

F. Anderson #2

3) API Well No: 47 - 103 - 1757

State - County - Permit

Form WW2-A (10-91)